

## AMENDMENT TO THE CLAIMS

1. (currently amended) An antenna comprising:
  - a patch element;
  - a ground plane coupled to the patch element;
  - a first strip line in the ground plane coupled directly to a first edge of the patch element, the first strip line to propagate a first polarized signal in a first direction when activated;
  - a second strip line in the ground plane coupled directly to a second edge of the patch element, the second strip line to propagate a second polarized signal in a second direction; and when activated,
  - wherein the first strip line is activated separately from the second strip line;
  - a first impedance matching flare coupled between the first edge of the patch element and the first strip line to adjust characteristics of the antenna; and
  - a second impedance matching flare coupled between the second edge of the patch element and the second strip line to adjust characteristics of the antenna.
2. (original) The antenna of claim 1, wherein the ground plane includes an aperture.
3. (original) The antenna of claim 2, wherein the aperture is cross-shaped.
4. (canceled)
5. (canceled)
6. (original) The antenna of claim 1, wherein the first direction is horizontal and the second direction is vertical.

7. (original) The antenna of claim 1, wherein the patch element is between 0.5 and 12 inches wide, the ground plane is between 1 inch and 18 inches wide, the first and second strip lines are between 0.03125 inches and 1 inch wide, and wherein the patch element and the ground plane are separated by between 0.25 inches and 5 inches.
8. (original) The antenna of claim 1, wherein the patch element is 4.25 inches wide, the ground plane is 6.5 inches wide, the first and second strip lines are 0.1875 inches wide, and wherein the patch element and the ground plane are separated by 0.5625 inches.
9. (canceled)
10. (currently amended) The antenna of claim 9~~1~~, wherein at least one of the first flare or the second flare is between 0.0625 and 2 inches wide, and ~~wherein the flare is~~ between 0.25 and 5 inches tall.
11. (currently amended) The antenna of claim 9~~1~~, wherein at least one of the first flare or the second flare is 0.5 inches wide and ~~wherein the flare is~~ 0.4375 inches tall.
12. (original) The antenna of claim 1, further comprising a dielectric material between the patch element and the ground plane.
13. (currently amended) The antenna of claim 1, wherein the second direction is ~~sixty degrees or more~~ greater than zero degrees and less than ninety degrees from the first direction.
14. (original) The antenna of claim 1, wherein the antenna is configured to read radio frequency identification (RFID) tags.

15. (currently amended) An interrogator comprising:  
a transmitter;  
a receiver coupled to the transmitter;  
a decoder coupled to the receiver to decode received signals; and  
an antenna coupled to the receiver and the transmitter, the antenna ~~comprises~~  
comprising a patch element coupled to a ground plane, a first strip line in the ground  
plane to propagate a first polarized signal in a first direction, a second strip line in the  
ground plane to propagate a second polarized signal in a second direction, ~~and~~ wherein  
the first strip line is activated separately from the second strip line.
16. (original) The interrogator of claim 15, further comprising a combiner coupled  
between the receiver and the transmitter.
17. (original) The interrogator of claim 15, wherein the first direction is horizontal and  
the second direction is vertical.
18. (original) The interrogator of claim 15, wherein the ground plane includes an  
aperture.
19. (original) The interrogator of claim 18, wherein the aperture is cross-shaped.
20. (currently amended) The interrogator of claim 15, wherein the first strip line is  
coupled to a first edge of the patch element and second strip ~~lines are~~ line is coupled to  
~~an~~ a second edge of the patch element.
21. (currently amended) The interrogator of claim ~~15~~ 20, further comprising a first  
impedance matching flare coupled between the first strip line and the first edge of the  
patch element, and a second impedance matching flare coupled between the second  
strip line and the second edge of the patch element.

22. (original) A method comprising:  
alternately activating a first strip line on an antenna to propagate a first signal having a first polarization and activating a second strip line on an antenna to propagate a second signal having a second polarization;  
searching for an identification tag using the first and second signals; and  
identifying the identification tag.
23. (original) The method of claim 22, wherein activating the first strip line generates a horizontally polarized signal, and wherein activating the second strip line generates a vertically polarized signal.
24. (original) The method of claim 22, wherein the identification tag is a radio frequency identification (RFID) tag.
25. (original) The method of claim 22, wherein the antenna is a patch antenna.
26. (currently amended) The method of claim 22, wherein the second polarization is oriented ~~more than sixty degrees greater than zero degrees and less than ninety~~ degrees from the first polarization.
27. (original) The method of claim 22, further comprising changing a frequency of the first and second signals.
28. (original) The method of claim 27, wherein changing the frequency comprises changing the frequency according to a user-programmed switching profile.
29. (original) The method of claim 27, wherein changing the frequency comprises changing the frequency according to an adaptive switching profile.